

Appl. No. 10/718,376  
Amdt. Dated June 11, 2007  
Reply to Office Action of March 9, 2007

### Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims:

1. (currently amended) A method comprising:

receiving metadata associated with a multimedia asset data file provided by at least one of a content provider and a multiple service or systems operator ("MSO"), the multimedia asset data file being delivered to end users upon requested;

validating the multimedia asset data file and the associated metadata by determining if the multimedia asset data file and the associated metadata comply with business rules provided by the MSO;

coordinating uploading delivering the multimedia asset data file and associated metadata to a video-on-demand ("VOD") server maintained by the MSO, wherein coordinating uploading delivering comprises

scheduling uploading tracking distributing the multimedia asset data file ~~and associated metadata from the content provider to a server maintained by the MSO, and~~

tracking uploading the multimedia asset data file and associated metadata from the MSO to the VOD server; and

providing usage reports relating to usage of multimedia asset data files by end users of the MSO.

2. (previously presented) The method of claim 1, wherein the metadata are provided by at least one of a plurality of content providers and a plurality of MSOs.

3. (currently amended) The method of claim 1, wherein tracking uploading distributing comprises:

tracking receipt of the multimedia asset data file in elements, the elements comprising at least one of a feature file, a preview file, a graphic file, and associated basic metadata, wherein the associated basic metadata comprises information on the elements used to confirm delivery of the elements;

receiving an identification of the MSOs scheduled to receive the multimedia asset data

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file from the content provider; and

receiving delivery dates for delivery of the multimedia asset data file to each of the MSOs.

4. (currently amended) The method of claim 1, wherein ~~coordinating uploading~~ tracking distributing comprises ~~coordinating uploading~~ tracking distributing using a delivery group, the delivery group comprising a plurality of multimedia asset data files.

5. (currently amended) The method of claim 1, ~~further comprising~~ wherein tracking distributing comprises:

registering the multimedia asset data file in order to identify the file, wherein registering the multimedia asset data file comprises:

assigning a provider identifier to ~~[[a]]~~ the content provider, and

assigning a unique identifier to ~~[[a]]~~ the multimedia asset data file provided by the content provider based upon the provider identifier and a provider asset identification, the provider asset identification being included with the multimedia asset data file by the content provider.

6. (currently amended) The method of claim ~~[[1]]~~, ~~further comprising~~ wherein tracking receipt comprises:

staging the multimedia asset data file by entering a name for the multimedia asset data file into a staging directory; and

providing a master markup language file for the multimedia asset data file, the master markup language file comprising distribution information, scheduling information, content information, and an identification for the multimedia asset data file, wherein the content information comprises data to enable retrieval of a plurality of elements to assemble the multimedia asset data file.

7. (previously presented) The method of claim 6, wherein the elements used to assemble the multimedia asset data file comprise at least one of a movie or feature file, a preview file, and a graphic file.

8. (currently amended) The method of claim 1, wherein ~~the multimedia asset data~~

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~~file comprises a plurality of elements, and tracking uploading distributing~~ comprises:

tracking transmission of ~~the~~ a plurality of elements of the multimedia asset data file to the MSO using a pitcher appliance;

tracking receipt of the elements of the multimedia asset data file using a catcher appliance; and

receiving an alarm signal if one of the elements of the multimedia asset data file is not successfully received by the catcher appliance.

9. (currently amended) The method of claim 1, wherein ~~the multimedia asset data file is identified with an asset locator, and~~ tracking uploading comprises:

providing ~~the~~ an asset locator identifying the multimedia asset data file to the VOD server;

providing a schedule to the VOD server comprising instructions for the VOD server to request the multimedia asset data file from a catcher and the metadata ~~from the VOD management system~~; and

tracking retrieval of the multimedia asset data file and associated metadata by initiating file transfers using the asset locator.

10. (original) The method of claim 9 wherein the file transfer is a file transfer protocol ("FTP") transfer.

11. (currently amended) The method of claim 1, wherein tracking uploading ~~further~~ comprises:

providing an asset locator identifying an element of the multimedia asset data file to the VOD server, the VOD server submitting the asset locator to a catcher appliance;

tracking transmission of the element from the catcher appliance to the VOD server using the asset locator to retrieve the element.

12. (currently amended) The method of claim 11, wherein tracking uploading further comprises:

receiving an alarm signal from the VOD server if the element ~~was~~ is not properly received.

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13. (currently amended) The method of claim 12, wherein tracking uploading further comprises

performing a follow-up or diagnosis upon receiving the alarm indicating that the element ~~was~~ is not properly received.

14. (previously presented) The method of claim 9, wherein the asset locator is an asset Uniform Resource Locator (URL).

15. (previously presented) The method of claim 1, wherein providing usage reports comprises:

receiving from the VOD server data on feature elements requested by end users of the MSO;

creating a master reporting database using the data on feature elements requested by end users; and

generating a usage report using the data contained in the master reporting database.

16. (currently amended) The method of claim 15, wherein providing usage reports further comprises:

restricting access by a content provider to the data contained in the master reporting database using the business rules provided by the MSO.

17. (previously presented) The method of claim 15, wherein providing usage reports further comprises:

analyzing the usage report to determine end user viewing characteristics; and

generating an advertising play list targeted to an end user based upon the viewing characteristics of the end user, wherein the advertising play list comprises advertising selected based upon the viewing characteristics of the end user.

18. (previously presented) The method of claim 17, wherein providing usage reports further comprises:

supplementing a multimedia asset data file with data contained in the usage report, wherein the usage report comprises usage data for the multimedia asset data file.

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19. (previously presented) The method of claim 15, wherein providing usage reports further comprises:

- analyzing the usage report to determine end user viewing characteristics;
- selecting multimedia asset data files based upon end user viewing characteristics; and
- performing a campaign management function chosen from the group consisting of bundling selected multimedia asset data files, setting pricing for selected multimedia asset data files, and setting promotions for selected multimedia asset data files.

20. (currently amended) A method comprising:  
receiving a plurality of multimedia asset data files from a plurality of content providers;  
receiving metadata associated with the plurality of multimedia asset data files from at least one of the plurality of content providers and a plurality of MSOs;

receiving business rules provided by the MSO, the business rules corresponding to the multimedia asset data file and being identified with particular MSOs;

coordinating uploading the multimedia asset data files to video-on-demand ("VOD") servers maintained by the MSOs using an asset locator assigned to each multimedia asset data file; and

tracking uploading the multimedia asset data files.

21. (previously presented) The method of claim 20, further comprising:  
validating the multimedia asset data files by determining if the received metadata and multimedia asset data files comply with business rules provided by the MSOs.

22. (previously presented) The method of claim 20, wherein coordinating uploading comprises:

coordinating uploading the associated metadata for the multimedia asset data files to the VOD servers;

- distributing a localized master schedule to each MSO; and
- providing a schedule update to each MSO at regular intervals.

23. (previously presented) The method of claim 22, wherein tracking comprises:  
tracking uploading the multimedia asset data files and the associated metadata to the

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VOD servers by reference to each MSO's localized master schedule.

24. (original) The method of claim 22, wherein each schedule update comprises instructions for inserting and deleting multimedia asset data files from each MSO's localized master schedule.

25. (previously presented) A method comprising:  
ingesting content and metadata associated with the content provided by a content provider;  
coordinating distribution of the metadata and the content; and  
coordinating uploading the metadata and the content to a server for delivery to an end user according to scheduling and business rules provided by a multiple service or systems operator (MSO).

26. (previously presented) The method of claim 25 further comprising:  
providing visibility into usage of the content.

27. (currently amended) The method of claim 25 wherein ingesting comprises:  
registering the content; and  
coordinating accessing the content located in one of an internal location and an external location.

28. (previously presented) The method of claim 27 wherein registering the content comprises:  
assigning a provider identifier to the content provider; and  
assigning a globally unique identifier to the content based on the provider identifier and a provider asset identifier.

29. (currently amended) The method of claim 25 wherein ingesting comprises:  
receiving the business rules from[()] the MSO; and  
validating the metadata and the content using the business rules.

30. (previously presented) The method of claim 29 wherein receiving the business

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rules comprises:

receiving the business rules including at least one of a rating filter, a pricing rule, a category rule, and a platform conversion rule.

31. (previously presented) The method of claim 25 wherein ingesting comprises: customizing an electronic program guide (EPG).

32. (previously presented) The method of claim 25 wherein ingesting comprises: providing an interface to allow a user to view and analyze metadata and scheduling information associated with the content.

33. (previously presented) The method of claim 25 wherein coordinating the distribution comprises:

interacting with an asset distribution system (ADS) to facilitate delivery of the content from a content provider to the MSO, the ADS including a pitcher and a catcher.

34. (currently amended) The method of claim 33 wherein interacting with the ADS comprises:

receiving information regarding when a transmission of an element of the content is initiated from the pitcher;

requesting retransmission of the element if an alarm is received from the catcher; and  
tracking a request from a server to release the content received by the catcher; ~~and  
tracking delivery of content from the catcher to the server.~~

35. (previously presented) The method of claim 25 wherein coordinating uploading comprises:

receiving a schedule request from a server;

providing a customized or localized master schedule for the MSO to the server, the master schedule having an asset locator;

receiving a metadata locator corresponding to the content from the server;

providing an asset locator to the server in response to the metadata locator, the server retrieving an element of the content from a catcher using the asset locator; and

interacting with the server during transfer of the element of the content from the catcher to the server.

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36. (previously presented) The method of claim 35 wherein providing the asset locator comprises:

re-transmitting the asset locator upon receiving an alarm from the server indicating that the asset locator is not received properly by the server.

37. (previously presented) The method of claim 35 wherein interacting with the server comprises:

performing a follow-up or diagnosis upon receiving an alarm from the server indicating that the element is not received properly by the server.

38. (currently amended) The method of claim 26 wherein providing visibility into usage of the content comprises:

preparing a usage report; and

providing access to the usage report to a multiple service or systems operator (MSO) or a content provider.

39. (previously presented) The method of claim 38 wherein preparing the usage report comprises:

creating a master reporting database including usage information from across a MSO network.

40. (previously presented) The method of claim 39 wherein preparing the usage report further comprises:

exporting the usage report to an analysis system.

41. (currently amended) A content management system comprising:

an external layer to interface to an application client;

a component programmatic application program interface (API) coupled to the external layer to interface to a plurality of engines comprising:

a workflow engine to manage workflows of ingesting a content and metadata associated with the content provided by a content provider, coordinating distribution of the metadata and the content[[:]], and coordinating uploading the metadata and the content to a server for delivery to an end user according to scheduling and business rules provided by a multiple service or systems operator



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(MSO); and

a relational database to store the metadata.

42. (previously presented) The system of claim 41 wherein the plurality of engines further comprises:

a business objects engine to managing business rules associated with the content, the business rules being provided by the MSO;

a package engine to manage packaging the content;

a scheduling engine to schedule deployment of the content;

a platform converter engine to customize an electronic program guide (EPG) designated by the MSO; and

a localization engine to localize the content.

43. (previously presented) The system of claim 41 wherein the external layer comprises:

a Web service API to facilitate communication with an application used by one of the MSO and the content provider.

44. (previously presented) The system of claim 43 wherein the Web service API performs operations comprising:

registering the content;

receiving a confirmation call from one of a pitcher and a catcher regarding status of transfer of an element of the content; and

receiving a schedule request from the server for a schedule to distribute or upload the content.

45. (previously presented) The system of claim 44 wherein the Web service API further performs operations comprising:

receiving a metadata request from the server for localized package metadata.

receiving a reporting call from the server to deliver usage report.

46. (currently amended) A system comprising:

a server;

a distribution network coupled to the server to distribute a content provided by a content

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provider; and

a content management system coupled to the server and the distribution network, the content management system comprising:

an external layer to interface to an application client;

a component programmatic application program interface (API) coupled to the external layer to interface to a plurality of engines comprising:

a workflow engine to manage workflows of ingesting the content and metadata associated with the content, coordinating distribution of the metadata and the content[[]], and coordinating uploading the metadata and the content to the server for delivery to an end user according to scheduling and business rules provided by a multiple service or systems operator (MSO); and

a relational database to store the metadata.

47. (previously presented) The system of claim 46 wherein the plurality of engines further comprises:

a business objects engine to managing business rules associated with the content, the business rules being provided by the MSO;

a package engine to manage packaging the content;

a scheduling engine to schedule deployment of the content;

a platform converter engine to customize an electronic program guide (EPG) designated by the MSO; and

a localization engine to localize the content.

48. (previously presented) The system of claim 46 wherein the external layer comprises:

a Web service API to facilitate communication with an application used by one of the MSO and the content provider.

49. (previously presented) The system of claim 48 wherein the Web service API performs operations comprising:

registering the content;

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receiving a confirmation call from one of a pitcher and a catcher regarding status of transfer of an element of the content; and

receiving a schedule request from the server for a schedule to distribute or upload the content.

50. (previously presented) The system of claim 49 wherein the Web service API further performs operations comprising:

receiving a metadata request from the server for localized package metadata.

receiving a reporting call from the server to deliver usage report.

51. (previously presented) The system of claim 46 wherein the distribution network comprises:

a pitcher used by the content provider to transmit the content and the metadata to the MSO via a distribution channel;

a catcher used by the MSO to receive transmission from the pitcher via a downlink channel.

52. (previously presented) The system of claim 51 wherein the distribution channel comprises a satellite uplink facility and the downlink channel comprises a satellite downlink facility.

53. (previously presented) The system of claim 51 wherein one of the pitcher and the catcher communicates with the content management system via a network connection.

54. (previously presented) The system of claim 51 wherein the catcher receives the content locally using one of a physical medium, a local network, and a terrestrial-based network.

55. (previously presented) The system of claim 46 wherein the content is one of a video-on-demand (VOD) content, an asset data file, a broadband content, and a network content.